MEMORANDUM

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Arizona Corporation Commission

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SUBJECT: Comments on Environmental Portfolio Standard Issues

Attached are the comments relating to the ACC's upcoming workshop on EPS Changes and the issues raised in recent correspondence from the ACC. Please contact us if you have any questions.

Comments of the Solar Energy Industry on Modifications to the Environmental Portfolio Standard

The Arizona Solar Industry appreciates the opportunity to comment on the seven issues identified in staff memos dated Feb 6, and Feb 17, 2004 regarding the future of the Environmental Portfolio Standard as set forth in Decision 66798 dated February 24, 2004.

Need for Guidance Regarding the Baseline

At the outset, the solar industry requests that the baseline for the workshops be established as set forth in the February Decision. It states "Option 2 will serve as the baseline for our analysis of appropriate levels for surcharges and portfolio percentages in the workshop process." Option 2 continues the renewable energy requirement increase to 1.1% by 2007. The Decision goes on to order that the scheduled increase in the portfolio percentage be as specified in the EPS …"shall continue until it reaches the specified maximum of 1.1%." Finally the Decision orders that staff commence a series of workshops …"to further examine the issues of appropriate resource mix, surcharge levels, portfolio percentages and phase-in levels. Staff shall submit a report containing the results and recommendations of those workshops to the Commission."

It is the solar industry's belief that this decision requires utilities to proceed with implementing the EPS as ordered in the Decision adopting the Rule in 2001 and that Option 2 serve as the baseline for the workshop process. As such, the Decision solidifies the market and above all provides market certainty through 2012. These elements have been missing in the EPS to this point. We are concerned other stakeholders are referring to the decision as merely symbolic and that the part of the decision ordering the workshops to examine the various issues surrounding the current EPS has the effect of voiding the decision. Therefore, we believe it must be made clear to all parties involved in the workshop process that the Commission through Decision 66798 meant that the utilities subject to the rule are obligated to meet the 1.1%, compliance level with the 60% solar electric percentage. We also believe Decision 66798 maintains all extra credit multipliers and establishes the adopted rule as the baseline for workshop deliberations. We strongly recommend that specific guidance to these points be made prior to the workshops.

We also believe that the workshop should initiate its process with a firm understanding of the current EPS and its implementation including those actions and projects completed since the 2002 Cost Evaluation Working Group Report. Utilities should provide an update both in terms of systems installed and how funds have been used. We believe this review will show that the Rule has had a positive impact in advancing solar and renewable energy in the state, and that this impact is growing. For example Arizona Public Service's recent announcement of the increase in its support for customer-sited systems has resulted in a tremendous customer response. Likewise, Tucson Electric's efforts at building its Springerville solar plant have resulted in a cost breakthrough of ten cents per kilowatt-hour for solar-electric power. Any modification of the EPS should build on, not degrade, these advances. The current EPS has placed Arizona on a path to be the solar leader of the nation. Yet more can be done.

In commenting on the issues identified in Staff memos of Feb 6th, and 17th, Memos:

1. Increase in the EPS Funding Levels

The issue of EPS funding is a two-part question. The first deals with funding the EPS as adopted.
The Cost Evaluation Working Group Report in recommending Option 2 acknowledged that there are not sufficient funds to meet the renewable energy goals set forth in the EPS. To mitigate this problem and to enhance the likelihood that the 1.1% goal can be achieved certain policies could

be pursued without changes to the EPS. The Working Group should review and determine the viability of these policies. They include:

A. Seeking additional leveraging opportunities such as customer buy-downs or partnering with municipal or other public and private entities to install solar. In this regard the AriSEIA proposal for a uniform EPS credit purchase program, docketed on Feb 9, 2004, should be reviewed and adopted at the first workshop. This proposal will add almost $100 million of leveraged funds to the EPS without increasing the surcharge.

B. Provide utilities with the option of requesting Commission approval of an accounting order authorizing the utilities to create a deferral account for the inclusion of expenditures of the EPS projects in excess of the current approved funding. Recovery of the deferred expenditures would be addressed in a future rate case or the establishment of some other Commission-approved surcharge mechanism for the respective utility. Further it recommended that if directed by the Commission, Staff could pre-approve new projects for which cost recovery could be allowed. We continue to believe that this is also a viable alternative to increasing EPS funding levels. We recognize that cost recovery is the critical issue in any implementation plan. Cost recovery through the rate case mechanism would be a better fit with the normal way utilities and the Commission interact.

C. The Commission should recognize as a cost for meeting the EPS requirement only those costs in excess of capacity and energy costs displaced by the EPS resources. Again those costs could be recovered in rate cases or recovered through a purchased power and fuel adjustor mechanism.

D. Finally, Option Two recommended that the Commission explicitly allow utilities to enter into long-term purchase obligations. This action would lower costs and attract an aggressive independent power producer response.

Another proposed mechanism that the solar industry supports and believes could be implemented without change to the EPS is by keeping the surcharge at specified $0.00087 but removing the caps. This action appears to be sufficient to fund the EPS as ordered. As stated above, utilities could be authorized to recover approved costs in excess of this level through an adjustor mechanism.

The second part of the funding issue concerns funding of any increase in the portfolio standard. As discussed below, the solar industry proposes that the solar percentage be retained as a critical baseline element to any expanded portfolio. We propose the following funding options be considered as part of the discussion of any increase in the portfolio:

A. Funding of the solar portion should remain as a separate EPS surcharge and used for the purposes stated in the original decision. One modification to this should be the inclusion of small wind systems in the same context as solar with access to the same credit multipliers.

B. The workshops should spend the majority of the discussion on determining how much the renewable percentage should be raised beyond the 1.1% using renewable resources that are closer to cost competitive status but are less abundant in Arizona than solar. Once a total renewable percentage increase is agreed to, a separate decision by the Commission should direct the utilities to develop this amount of renewable source generation into their portfolios. Funding for these cost competitive or near cost competitive technologies such as wind, land fill gas, and geothermal should be included in the wholesale bidding process, Track B, with criteria for competitive requirement recognizing the enhanced portfolio requirements and any increased costs recovered through normal rate case proceedings.

C. Energy efficiency programs and funding be included in rate case proceedings specific to the respective utility.

Finally, any discussion of funding the existing or expanded EPS should include a discussion and recommendation regarding the role of renewable energy and energy efficiency in the growing market for emission reduction credits and what the impact of revenues from this market can have on EPS costs and funding. A specific output of the workshops should be a recommendation to the Commissioners on how such credits should be accounted for and used to benefit Arizona. For instance, although present national policy suggests that the EPS affected utilities cannot claim a value for credits clearly caused by EPS projects because the funds were collected through regulatory policy, some entity should be able to claim this value. We believe the ratepayers of Arizona through action by the Commission may have some claim to such credit value.

2. <u>EPS Expiration Date</u>

The solar industry believes that removing the expiration date solidifies support for solar and renewable energy in Arizona over the long term. An output of the workshops should be a recommendation to the Commission as to whether the Surcharge related to the solar portion of the EPS should be continued after 2012 and, if so, in what amount.

3. <u>DSM Funding</u>

The level of DSM funding that was part of the Systems Benefit Charge prior to the EPS is woefully insufficient. The solar industry supports the Southwest Energy Efficiency Project, SWEEP, and efforts to require an energy efficient program together with sufficient funding to positively impact the rate of energy demand in Arizona over the next ten years. The solar industry particularly recommends a strong effort in high performance buildings. The working group should review and endorse SWEEP's plan.

4. <u>Allocation of Funding Among Technologies</u>
and
6. <u>Phase-In Schedule</u>

Issues 4. and 6. appear to be the same and concern the EPS provision that solar energy constitutes at least 60% of the 1.1% required portfolio. The solar industry believes this 60% requirement is appropriate for the current EPS and should be retained as a baseline element for any revised portfolio. First, such action recognizes as policy that Arizona's largest renewable resource is the sun. Data from projects initiated under the EPS clearly show that the energy output from solar in Arizona exceeds the output of solar projects anywhere else in the country. .

Second, the policy recognizes the role solar can play both in urban, customer-sited applications and in large utility-scale installations. Installed as part of a comprehensive program that targets high performance buildings, energy efficiency and solar can positively impact the environment in our rapidly growing urban centers. The Arizona policy is unique among the states in its potential for both large utility and distributed generation applications emphasizing customer-owed, customer-sited projects at residences and small commercial buildings. This unique aspect is derived directly from the 60% requirement for solar and the market certainty it creates.

Larger solar electric systems make a positive impact by displacing energy and capacity needed to meet growth in electricity demand. Arizona's EPS policy, particularly efforts by TEP, has validated a model for financing solar systems that adds capacity on a modular basis and at a cost that matches the expense with the revenue expected from the generation. The TEP experience has determined this "tipping point" occurs at about 1MW, and that solar electric systems of at least this size can be installed without resorting to expensive cost of financing requirements.

However many renewable energy systems including large concentrating solar systems and wind must be installed in plant sizes 50-100 MW to deliver the lowest cost electricity. Such plants also usually require longer design, permit, and resource assessment times. These additional requirement in turn necessitate that cost of financing be included as part of plant construction which in increases the cost of delivered electricity. The workshop should investigate EPS phase-in strategies that would support investment in these larger scale plants.

5. Increasing the Portfolio Standard

The solar industry joins with other members of the renewable energy industry, the energy efficiency advocates and environmental groups in seeking an expanded portfolio standard that incorporates the solar energy requirement as outlined above. There are two factors that lead to this recommendation.

As a member of the Environmental Mitigation Working Group, we support the efforts of Western Resource Advocates recognizing the need for policies to mitigate the increasing cost risks to consumers. The workshops should include a discussion of the increased risk of higher costs from anticipated regulation of pollutants including greenhouse gas emissions, from increased costs due to rising prices of natural gas, increased costs stemming from need to curtail water use, and the increased costs caused by growing heat island phenomena in Arizona's urban areas. Increasing the use of renewables and energy efficiency is the appropriate response to these looming problems, and the final report should attempt to quantify these benefits.

Increasing the percentage of solar, renewable energy, and energy efficiency is the appropriate response to Arizona's growing demand for electricity. The solar industry urges the working group determine what percent of the projected growth in demand between now and 2020 can be met beyond the baseline of the current EPS with increased use of renewable energy and energy efficiency. This conclusion should be developed using the current EPS data baseline, the CEWG Report, a determination of recoverable amounts of energy from the renewable energy resources that can be implemented in policy through Track B, the estimates of energy efficiency gains contained in the SWEEP Report, and the projected costs of the energy from traditional sources through 2012.

In considering increases to the portfolio the workshop should also review the implementing oversight mechanisms. The current EPS requires only a yearly accounting of the actions. The solar industry believes that stronger oversight may be in order including requiring up-front plans, review and approval of changes to plans, up dates to the Cost Evaluation Working Group Report and penalty mechanism for non-compliance.

7. New and Emerging Technologies

The solar industry recommends that the workshops adopt the renewable energy technologies as defined in R14-2-1618 M for the purposes of meeting an environmentally friendly portfolio standard. Further clarification regarding environmentally friendly renewable energy technologies may be necessary. The current definition includes solar, solar thermal, in-state landfill gas generators, wind generators, and biomass generators. The working group may wish to further clarify the meaning of biomass generators, and consider adding low head hydro and geothermal. The solar industry believes that fuel cells should not be considered as environmentally friendly resources because the likely fuel for such cells in the next decade will be natural gas, not hydrogen. Similarly nuclear technologies are simply not renewable by any definition including commonly used U. S. Department of Energy determinations, and their role in Arizona's energy future should be left to other forums. We also propose the working group endorse the in-state provision. The intent of the EPS should be to encourage the adoption of renewable technologies that are available in Arizona today.

Additional Comments

The solar industry believes there are additional items that should be addressed and/or adopted during the upcoming workshop process. These items have been referenced in past correspondence with the Commission and are as follows:

- Remove the 20% restriction on solar water heating systems within the original framework of the EPS

- Allow solar water heating systems to replace electric <u>and</u> natural gas water heating systems
- Remove ambiguous language regarding solar water heating credit purchase requirements
- Establish a separate extra-credit multiplier for customer-sited, customer-owned solar thermal and solar-electric systems. To date, large-scale, utility-owned generating stations have been allowed to take the exact same multipliers that are assigned to small-scale, distributed systems owned by customers of the LSE. The original intent of providing extra-credit multipliers to promote distributed systems has been misconstrued and is not providing additional credits for small, customer-owned systems.

The solar industry looks forward to a focused workshop process and as an active participant will strive for a conclusion and a report no later than October 2004.